

REMARKS

Claims 1-5 and 21-31 are pending in this Application. By this Amendment, claims 1, 4-5, 21-25, 27, and 29 have been amended, and claim 32 has been canceled without prejudice to or disclaimer of the subject matter recited therein. Support for the amendments may be found at least in paragraph [0017] of the published Specification. No new matter is added. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Claim Rejections – 35 U.S.C. §§ 102 and 103

The Office Action rejected claims 1-3, 21, and 23-26 under 35 U.S.C. § 102(b) as being anticipated by Ellis (US 3,718,767); rejected claims 4, 22, 27, 29, and 30-32 under 35 U.S.C. § 103(a) as being unpatentable over Ellis in view of Kenney (US 6,009,129); and rejected claims 5 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Ellis in view of Soliman (US 5,799,005). The Applicants respectfully traverse the rejections, as follows.

The Applicants disclose a novel and unobvious approach for handoff in a wireless communication system. For example, in accordance with an embodiment of the disclosure, a wireless device may receive one or more signals including an on-channel signal and out-of-channel signals. The wireless device may then produce on-channel received samples by removing out-of-channel signals from the baseband signal, and produce out-of-channel received samples based on the out-of-channel signals, wherein the out-of-channel received samples include pilot information. Using the pilot information, the wireless device may then search for hard handoff candidate frequencies. In this manner, the wireless device can concurrently process signals that are received on different carrier frequencies, and thus, perform a search for a base station without suspending communication of traffic of data in an ongoing communication call via a different base station.

The concept of such a novel approach is captured in claim 1, for example. Claim 1 recites “a communication receiver, comprising: ... a processor that processes said base band signal to produce out-of-channel received samples based on the out-of-channel signals, the *out-*

of-channel received samples including pilot information; and a searcher that is configured to *search for hard handoff candidate frequencies using the pilot information*” (emphasis added). Amended claims 21-24 and 29 recite similar features.

The Applicants respectfully submit that Ellis, Kenney, and Soliman, either individually or in combination, fail to disclose or suggest a receiver including at least a processor that processes said base band signal to produce out-of-channel received samples based on the out-of-channel signals, the *out-of-channel received samples including pilot information*; and a searcher that is configured to *search for hard handoff candidate frequencies using the pilot information*, as recited in claim 1, and similarly recited in claims 21-24 and 29.

Ellis, in col. 4, line 52, to col. 5, line 15, with reference to Fig. 1, discloses a multiplex out-of-band signaling system. This system is configured to receive a signal including (1) speech channels, (2) pilot signals associated with the speech channels, and (3) a composite multi-level signaling signal. After the signal is mixed to a baseband level, it is transmitted to a low pass filter 15 and a band pass filter 18. The low pass filter 15 passes the (1) speech channels and (2) pilot signals; and the band pass filter 18 passes the (3) a composite multi-level signaling signal, which eventually is separated into its respective levels. The system of Ellis, however, does not include a component, such as the claimed searcher, that is configured to search for hard handoff candidate frequencies using the pilot information included in an out-of-channel received sample. As such, Ellis fails to disclose the features recited in claims 1, 21-24, and 29.

Secondary references Kenney and Soliman likewise fail to disclose a receiver including at least a searcher configured to search for hard handoff candidate frequencies using the pilot information, as recited in claims 1, 21-24, and 29.

As Ellis, Kenny, and Soliman, individually or in combination, fail to disclose all of the features recited in claims 1, 21-24, and 29, the Applicants respectfully submit that claims 1, 21-24, and 29 define patentable subject matter. Claims 2-5, 25-28, and 30-31 depend from claims 1, 24, and 29, respectively, and therefore, also define patentable subject matter, as well as for the additional features recited therein.

CONCLUSION

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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